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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,137	03/20/2002	Dan Akerfeldt	030481-0183	7034

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EXAMINER

ROBERTS, PAUL A

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/018,137

Applicant(s)

AKERFELDT ET AL.

Examiner

Paul A Roberts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 & 9-22 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-10 and 19-22 is/are allowed.
- 6) ☒ Claim(s) 1-4, 12-14 and 18 is/are rejected.
- 7) ☒ Claim(s) 5, 11, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/18/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Newly submitted claim 17 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: a species election was already made specifically withdrawing claims drawn to the species claimed in claim 17.
2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 17 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 12, 13, 14, & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson et al. (Richardson) 3,760,627. Richardson discloses a tool (figure 2) for inserting and mating two plug members (28, 27) of a sealing device (11) for closing a wound in the wall of a blood vessel, one plug member of the sealing device being a distal plug member (28) to be positioned inside the blood vessel and the other plug member being a proximal plug member (27) to be positioned outside of the blood vessel, the distal plug member being provided with an elongated retracting means (25) extending from the distal plug member, wherein the tool

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comprises a gear mechanism (near 50) coupled to the retracting means for converting a movement of the tool (when the handles are pressed downwardly) in a proximal direction (towards the user) away from the wound, when the distal plug member is anchored in the blood vessel, to a pushing movement (28 is pushed into 26) for moving the proximal plug (28) in a direction towards the distal plug member, the pushing movement being induced by a stretching force (pulling on 25) in the retracting means.

4. Regarding claim 2, the Richardson tool comprises a spring-biased coupling means (34) for releaseably (the machine can be disassembled) coupling the retracting means (25) to said gear mechanism (near 50).

5. Regarding claim 3, the Richardson tool wherein the biasing force of said spring-biased coupling means (34) is selected to release the retracting means when the stretching force in the retracting means exceeds a selected force attributed to the rupture - tension of the wall of the blood vessel. If sufficient force is applied by the coupling means on the retracting means the spring will break and the retracting means will be released.

6. Regarding claim 4, the Richardson tool comprises: an outer feeding means (23) for pushing the proximal plug member (27), said outer feeding means being provided with an axial through bore; an inner feeding means (30) for pushing the distal plug member (28), said outer feeding means being provided with an axial through bore for moveably receiving said retracting means (25), said inner feeding means being disposed for movement in said bore of said outer feeding means, said gear mechanism (near 50) being coupled to said inner feeding means and said outer feeding means; and a pushing means (14) for pushing the gear mechanism (50), the

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outer feeding means (23), and the proximal plug member (27), with respect to a casing (18) of the tool, in a direction towards the wound.

7. Regarding claims 12 and 18, Richardson discloses a tool (fig. 2) for closing a wound by positioning a distal plug inside a blood vessel and a proximal plug positioned outside of the blood vessel, comprising: a casing (12); and a movement direction reverser (44) adapted to be coupled to a retractor (31) which is coupled to the distal plug (28), wherein the movement direction reverser, when coupled to the retractor, is adapted to convert movement of the casing in a proximal direction away from the wound when the distal plug is anchored in the blood vessel to a pushing movement to move the proximal plug (27) in a direction towards the distal plug, the pushing movement to move the proximal plug being induced by a tension force imparted on the retractor.

8. Regarding claim 13, the tool comprises a spring-biased coupling (34) adapted to releaseably couple the retractor to the movement direction reverser.

9. Regarding claim 14, the biasing force of said spring-biased coupling (34) is sufficient to release the retractor when the force imparted on the retractor exceeds a selected force based on the rupture - tension of a wall of the blood vessel.

### *Response to Arguments*

10. Though not alleged in the applicant's response, the matter of does the Richardson device have the capability to close a wound in a punctured blood vessel was discussed in the phone interview. Upon consideration of the reference, it is apparent that while Richardson did not intend his device to be used this way, the structure of the device clearly enables the function.

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There is nothing disclosed by Richardson that would lead one to believe the device cannot be used on alternate mediums such as skin, vessels, or organs. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

***Allowable Subject Matter***

Claims 5, 11, and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 9-10 and 19-22 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, the complex gear system of claim 5 is not taught by Richardson.

Regarding claims 9-10 and 19-21, the explicit method of using a tool to seal a puncture wound in a blood vessel is not taught by Richardson.

Regarding claim 11, the distal plug does not have a bore inside it.

Regarding claims 15-16, the direction reverser does not push the outer feed boom with respect to the casing.

Regarding claim 22, the Richardson device does not comprise a suture.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5666710 discloses another rivet gun structurally similar to the applicant's device.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A Roberts whose telephone number is (703) 305-7558. The examiner can normally be reached on 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on 703-308-2496. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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04/22/04



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